Contact Details
Meacham Associates
+1 508 685 9311
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Representative Positions Held

2008 – present, *Meacham Associates*, Managing Principal

2008 – 2017 *Worcester Polytechnic Institute*, Associate Professor

2000–2007 – *Arup*, Principal; Global Leader – Risk Consulting Practice; Business Leader – Management Consulting (Americas); Business Leader – Risk & Security (Americas); Fire Engineering Consultant

1995–2000 –*SFPE*, Research Director and Technical Director

Qualifications

P.E., Massachusetts, 47238

P.E., Connecticut, 17906

Chartered Engineer, UK, Institution of Fire Engineers, 519749

EUR ING, FEANI, Europe, 34094

Ph.D., Risk and Public Policy, Clark University

M.S., Fire Protection Engineering, Worcester Polytechnic Institute

B.S., Electrical Engineering, Worcester Polytechnic Institute

Professional Memberships

International Association for Fire Safety Science (Chair, 2021-23)

Institution of Fire Engineers

Society of Fire Protection Engineers

National Fire Protection Association

Key Data

Brian has nearly forty years of international experience helping organizations of all sizes address complex building and infrastructure fire safety design and risk mitigation challenges, helping governments undertake reviews and addressing building and fire regulatory system challenges, and conducting research in these and related areas. He is widely recognized as an authority on risk-informed performance-based approaches to engineering and regulation.

Awards, Recognition, Appointments

Fellow, IFE

Fellow, SFPE

Fulbright Global Scholar Awardee

ICC Global Award

SFPE Harold E. Nelson Service Award

Chair, NFPA TC Fire Risk Assessment Expert, US TAG, ISO TC92 SC4

Representative Recent Projects

Confidential Client. Contracted as Expert Technical Consultant on project to assess the building permitting and approval journey in a MENA country (May-Sep 2023).

Pacific Region Infrastructure Facility (PRIF) / Asian Development Bank (Tokyo, Japan). Contracted to provide expert input on fire provisions and building code development for Pacific Islands Countries of Kiribati, Nauru and the Federated States of Micronesia (Mar 2023-July 2023)

Pixeling S.L. (A Coruña, Spain). Contracted to undertake qualitative fire risk assessment and building and fire code needs assessment for a paint storage and manufacturing facility being planned in a US state for a confidential client. Involved review of applicable planning, zoning and building codes and standards, and consideration of environmental and hazardous materials issues, and preparation of summary report (Feb – May 2023).

World Bank (Washington, DC, USA). Contracted to provide review of the fire safety section of the draft building code of Malawi, to provide peer review of the BRCA 2.0, and to develop a diagnostic to help team members review fire-related building code provisions (Mar 2022 – Jun 2023).

Kestral Group (Wellington, New Zealand). Engaged to provide expert input and peer review for project to support the development of a standardized approach to fire design relating to means of escape and evacuation procedures to enable efficient building consenting and evacuation scheme approvals with a view to Health New Zealand. (Dec 2021 – Apr 2023)

Cladding Safety Victoria (Melbourne, Australia). Contracted to provide independent international expert review of the draft Protocols for Managing Cladding Risk (PMCR), which detail CSV's proposed rules for assessing the risks of flammable cladding and applying a proportionate response (Mar 2022 -).

Port Authority of New York and New Jersey, (New York, NY). Contracted (via Mott MacDonald) to provide fire safety peer-review services of a performance-based fire safety design for an innovative theater project with moveable floors and configurable theater spaces (Feb 2022 -)

UCSD (San Diego, CA). Fire safety engineering and fire research support for project on Earthquake and Fire-Following Earthquake Resiliency of Mid-Rise Cold-Formed Steel Buildings (2021 –)

SFPE Foundation (Bethesda, MD, USA). Research to lay the groundwork for future development of risk-informed performance-based tools for the assessment of sustainable and fire resilient buildings (with Lund University), (Sep 2022-June 2023).

Kindling, Inc. (Duxbury, MA). Conducted research into the fire safety risk of the insecure and vulnerably sheltered in USA for the National Fire Protection Association (Dec 2021 – Aug 2022).

Port Authority of New York and New Jersey, (New York, NY). Contracted (via Mott MacDonald) to provide fire safety peer-review services for a historic airport terminal project (Dec 2018 – Jan 2019).

Port Authority of New York and New Jersey, (New York, NY). Contracted (via Mott MacDonald) to provide peer-review services for a performance-based design of a high-hazard facility (March 2018 –)

Representative Publications

Books & Book Chapters

Meacham, B.J. and McNamee, M. (Eds.) Handbook of Fire and the Environment: Impacts and Mitigation, Springer, (https://link.springer.com/book/10.1007/978-3-030-94356-1), August 2022.

Meacham, B.J., "Fire Risk Analysis," Chapter 8, Section 3, Fire Protection Handbook, 21st Edition, National Fire Protection Association, Quincy, MA, 2023.

Hurley, M. and Meacham, B.J., "Systems Approach to Building Fire Safety Design," Chapter 9, Section 1, Fire Protection Handbook, 21st Edition, National Fire Protection Association, Quincy, MA, 2023.

Meacham, B.J., A Global Plan for a Decade of Action for Fire Safety, Royal Institution of Chartered Surveyors, London, (https://www.rics.org/globalassets/rics-website/media/knowledge/decade-of-action-for-fire-safety_oct2021.pdf), October 2021.

Fitzgerald, R.W. and Meacham, B.J., *Fire Performance Analysis for Buildings*, John Wiley & Sons, 2017.

Meacham, B.J., Johnson, P.J., Charters, D. and Salisbury, M., "Building Fire Risk Analysis," Chapter 75, *SFPE Handbook of Fire Protection Engineering*, 5th Ed., Springer, 2015.

Tubbs, J. and Meacham, B.J., *Egress Design Solutions: A Guide to Evacuation and Crowd Management Planning*, John Wiley & Sons, 2007.

Project Reports

The Invisible US Fire Problem: Homelessness and Informality, Kindling & National Fire Protection Association (with D. Antonellis, S. Vaiciulyte and C.R. Jennings), (https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/US-Fire-Problem/osInvisibleUSFireProblem.pdf) September 2022

Global Plan for a Decade of Action for Fire Safety, International Fire Safety Standards Coalition (decade-of-action-for-fire-safety_november-2021.pdf (rics.org)), 2021.

Developing a global standard for fire reporting, Royal Institution of Chartered Surveyors, London (developing-a-global-standard-for-fire-reporting.pdf (rics.org)), 2020.

Urban Fire Risk Assessment and Mitigation Evaluation (Urban FRAME) Diagnostic, World Bank, Washington, DC, (with Moullier et al. https://openknowledge.worldbank.org/handle/10986/34671), Nov 2020.

*Building Regulatory Capacity Assessment, World Bank, 2016 (*https://openknowledge.worldbank.org/handle/10986/27655 .

Peer-Reviewed Papers

Meacham, B.J., "Fire performance and regulatory considerations with modern methods of construction," *Buildings and Cities*, 3(1), 464–487. https://doi.org/10.5334/bc.201 2022.

Elhami-Khorasani, N., Ebrahimian, H., Buja, L., Cutter, S., Kosovic, B., Lareau, N., Meacham, B.J., Rowell, E., Taciroglu, E., Thompson, M.P. and Watts, A.C., Conceptualizing a Probabilistic Risk and Loss Assessment Framework for Wildfires, Natural Hazards, https://doi.org/10.1007/s11069-022-05472-y, 2022.

Meacham, B.J., "A Sociotechnical Systems Framing for Performance-Based Design for Fire Safety," *Fire Technology*, https://doi.org/10.1007/s10694-022-01219-0

Meacham, B.J., van Straalen, IJ.J. and Ashe, B. "Roadmap for incorporating risk as a basis of performance objectives in building regulation," *Safety Science*, 141, 2021.

Osácar, A., Echeverria, J.B and Meacham, B.J. "Evaluation of the legal framework for building fire safety regulations in Spain," *buildings*, 11(2), 51; https://doi.org/10.3390/buildings11020051, 2021

Meacham, B.J., Stromgren, M. and van Hees, P., "A Holistic Framework for Development and Assessment of Risk-Informed Performance-Based Building Regulation, *Fire & Materials*, DOI:10.1002/fam.2930, 2020.

Meacham, B.J. and van Straalen, I., "A Socio-Technical System Framework for Risk-Informed Performance-Based Building Regulation," *Building Research & Information*, 2017.

Meacham, B.J., "Accommodating Innovation in Building Regulation: Lessons and Challenges," *Building Research & Information*, Vol.38, No. 6, 2010.

Meacham, B.J., Moore, A., Bowen, R. and Traw, J., "Performance-Based Building Regulation: Current Situation and Future Needs," *Building Research & Information*, 33, 1, 91-106, 2005